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Office-Based Prevention—How Can We Make It Happen?

THE ARTICLE BY Dr James in this issue of the journal stimulates discussion about the best ways to encourage the use and delivery of clinical prevention services in office practice.[1] The author describes a computer-based method of enhancing prevention, sending yearly reminders to devote a visit to patient-appropriate prevention and screening activities. The prevention activities will be those deemed age- and gender-appropriate by one of several expert bodies,[2,3] with modifications based on patient and physician preferences.

How might such a method work in practice? That depends on whether patients and physicians want to practice prevention and on what they expect from their efforts. Physicians express general agreement with expert guidelines on prevention,[4,5] and patients say that they are willing to practice prevention.[6,7] Still, few preventive services are provided at the recommended levels. Only a third of women receive timely and appropriate breast cancer screening services, and about half to two thirds are appropriately screened for cervical cancer.[8-14] Of high-risk candidates for influenza, in any year only 20% receive immunization,[15] and only about half of all smokers report that they have ever been told to stop smoking or to smoke less by a physician.[16] Even among relatively affluent, well-insured children, only 45% of two-year-olds and 55% of six-year-olds are current for all recommended immunizations.[17] Other prevention services have similar or even lower rates of appropriate use.[11]

There are a variety of reasons for our failure to deliver prevention services, attributable to the physician, the patient, or the system in which the encounter occurs.[18] Time, both the patient's and the physician's, has been recognized as a barrier.[17-22] Physicians in a faculty adult primary care practice spent just 8% of their time in prevention, 60% of this in breast and cervical cancer screening and influenza immunization.[23] This brief period includes time spent in dedicated prevention visits and, more often, time borrowed during illness visits.

Attitudes of physicians and patients may also form barriers to prevention. Physicians and patients may find it difficult to justify expending time, money, and effort on preventing illness that seems unlikely or distant. Physicians who are not preventionists[24] by training may find remote outcomes or epidemiologically-based predictors unsatisfying.[24] Better personal health habits practiced by physicians have been shown, for male physicians, to lead to better prevention care for their patients.[25] The Women Physicians' Health Study, a study of the health and counseling practices of 10,000 women physicians being conducted by one of the authors (E.F.), should help clarify whether this is also true for women physicians.

Physicians may also forget to address prevention with their patients,[21] and applying risk profiles to the recommended schedules can make providing comprehensive prevention services even more complex. For example, the US Preventive Services Task Force (USPSTF) specifies 60 target conditions for prevention and 169 age- and gender-specific preventive services. One study used a computer-based algorithm of USPSTF rules based on age- and gender-specific risks to count an average of 24.5 recommendations for 230 adult ambulatory patients.[26] It is a difficult task to enumerate all appropriate recommendations and harder yet to complete them. Additionally, the logistics of prevention, such as the scheduling of mammograms, often done off-site from physicians' offices, provide further obstacles.

Physicians and patients may base decisions on patients' ability to pay or the availability of insurance reimbursement for preventive services.[13,22,27] Medicare, whose lead is often followed by private insurance companies, currently pays for only four preventive services: mammography, Pap smears, pneumococcal immunization, and hepatitis B immunization.[28] Hillary Rodham Clinton, in testimony to Congress about the Health Security Act, reported that she had to pay out-of-pocket for her last mammogram before her husband's inauguration. Even when physicians' and patients' knowledge, attitudes, and schedules allow for a preventive intervention to occur, restrictive and short-sighted financial policies may provide an enormous impediment to implementation.

Physicians have been overwhelmed with preventive guidelines, many conflicting,[7,29] and often are uncertain of appropriate screening schedules and procedures, leading some to underuse them. This may have changed,[30] however, with the publication of the USPSTF "Guidelines to Clinical Prevention Services" in 1989. That report, which included evidence-based recommendations and rankings of the effectiveness of available prevention services, has been widely disseminated. A new USPSTF report and the upcoming "Put Prevention Into Practice" campaign of the Department of Health and Human Services Office of Disease Prevention and Health Promotion may further improve physicians' knowledge about and confidence in the value of clinical prevention services.

How might an anniversary letter suggesting a prevention visit address these obstacles? A visit devoted solely to prevention and disease screening might relieve some of the time pressure felt by clinicians to work on established medical problems, though there is no guarantee that even

in such a visit the patient or the physician would focus solely or even primarily on prevention tasks. The same computer that generates the anniversary letter might also be used to produce educational materials, based on patient characteristics, that inform and prompt both the patient and the physician about recommended services, an approach that some feel will be powerful.[12,31] A recent trial showed that mailed reminders tailored to specific patient risks and concerns can increase mammography screening.[32] In another, patient nonresponders to cholesterol screening reminders stressed the need to personalize the message.[4] Computers can be made to be less forgetful than physicians or patients, removing that obstacle, at least while the reminder letter is in front of the physician. In time, the same system that is used to create and mail an anniversary letter may also aid in scheduling prevention services. All of these concerns may be helped, in part, by Dr James's suggested approach.

The hardest problems remain, however. Physician time for screening for breast and cervical cancer required 10.5 minutes for each mammogram and 11.5 minutes for each Pap smear completed just to counsel the patient, schedule the test, look up results, and do the Pap smear or the clinical breast examination.[23] Screening for just two diseases took up to 22 minutes, and while this may not be required every year, a single hour may not suffice for the 60 conditions on the USPSTF schedule. Reimbursement also remains a problem, though payment in the form of a periodic preventive health visit fee has been suggested.[33] Finally, no current scheme, computer-based or not, can adequately account for the preferences of patients and physicians about the prevention of distant diseases. These would seem to be the most difficult issues about office-based prevention services to resolve, and they are not likely to be much affected by an anniversary appointment devoted to prevention. Ultimately, Dr James's suggestion deserves to be debated and its value demonstrated, as does any thoughtful attempt to promote disease prevention in an era of increasingly constrained health resources and increasing emphasis on prevention.

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